

State of California
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5293-02

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California Type Evaluation Program
Certificate of Approval
for Retail Motor Fuel

For:

Retail Motor Fuel Dispenser
Model: LNG-XXXXXXXX*
Generic Name: LNG Dispenser
Capacity: Maximum Total Pounds 9999.99

Submitted by:

NexGen Fueling
(Division of Chart Industries)
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Standard Features and Options

* See model designation on Page 2

Micon 500LN electronic computing register with INFO-PAC remote hand-held communicator
Maximum total price: \$9999.99
Maximum total pounds: 9999.99
Maximum unit price: \$9.999
Battery back-up for recall of last sale in case of power failure
FLOWCOM S8 flow computer

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: January 18, 2002

Mike Cleary, Director

NexGen Fueling (Division of Chart Industries)
Retail Motor Fuel Dispenser
Model: LNG-XXXXXXXX
Generic Name: LNG Dispenser

Application: For use in retail/fleet motor fueling stations to dispense Liquefied Natural Gas as a stand-alone system.

Identification: The system information ID badge is located on the front of the dispenser housing.

Model Designation: The NexGen Fueling model designation consists of a variety of entries based upon the dispenser configuration. The device is identified by the model designation LNG-XXXXXXXX where the Xs are the code positions of the various device parameters. The device is known by the generic name of LNG Dispenser.

Code Position	Description
1 - Card Reader	O No Card Reader A Future Use
2 - Dispenser Nozzle & Hose	O JC Carter 1" LNG with 10 foot hose plus breakaway fitting A Parker 1" LNG with 10 foot hose plus breakaway fitting B Future Use
3 - Dispenser Housing & Sump	O Standard Enclosure with 250 psi MAWP, 61 gallon sump A Future Use
4 - Differential Pressure Transmitter	O Siemens Model 7MF4432 A Siemens Model 7MF4433 B Future Use
5 - Remote and Dispenser Indicators	O FLOWCOM S8 with Kraus Micon 500LN A Future Use
6 - Density Compensation	O Burns Model 200 A Future Use
7 - Composition Compensation	O Magnetrol #082-8303-400 A Future Use
8 - Meter Element (Model <u>SWM</u> <u>W-X-Y-Z</u>) SWM = Basic model W = Pipe size X = Restriction diameter (mm) Y = Alpha factor Z = Flow rates	O 3/4" FLOW (30-150 pounds/minute) A 1/2" FLOW (15-75 pounds/minute) B 1" FLOW (40-200 pounds/minute) C 1 1/2" FLOW (120-600 pounds/minute) D Future Use

Sealing: The event counters are located at the dispenser (Micon 500LN, Certificate of Approval Number 4755(a)-00) and the system controller (Flow Com S8 flow computer, Certificate of Approval Number 5013-00). Both components also have provisions for applying wire security seals through two drilled head screws and bolts. The differential pressure transmitter window cover incorporates a provision for wire security seal. The transmitter must indicate an "L" in the transmitter display window before affixing a security seal to ensure disabling the HART protocol.

Operation: As product flows through the meter orifice, the temperature and differential pressure are measured, and a calculation based upon information received by the central processing unit displays a quantity on the remote and dispenser indicator. The composition of the liquid is also monitored and factored into the calculation of liquid flow.

Test Conditions: The emphasis of the evaluation was on the device design, performance, and permanence. The dispenser was tested for accuracy and repeatability at several flow rates. Liquid composition was also altered during the test to verify the device automatically corrects for changes in the composition and density.

Results of the evaluation indicate the device complies with the applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2002 Edition

Tested By: Charlie Nelson (CA), Norman Ingram (CA)